

WELDREAM™ Plus

The WELDREAM Plus lineup features welding enhanced with improved weldability and mechanical properties, in addition to our popular conventional products. Below we introduce WELDREAM Plus products along with examples of their applications.

1 "NF-800R" flux for submerged arc welding that realizes highly efficient and highly functional welding

Applications Flat and horizontal fillet welding of architectural build H steel and bridge girders

Features

- Capable of handling 400-590N/mm² class steel by switching wires without the requirement no flux replacement.
- Excellent slag removability and bead shape due to melted flux.
- Achieving weld metal with high toughness. (47 J \leq at 0°C, corresponding to JIS Z 3183 S502-H and S582-H)



Table: Mechanical properties of weld metal with NF-800R

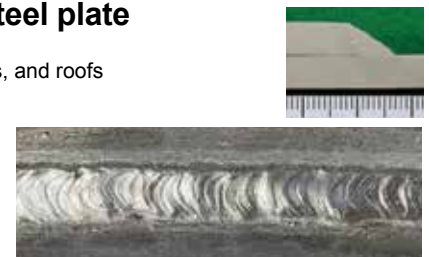
Steel type	Plate thickness (mm)	Wire (Tandem)	Heat input (kJ/cm)	YP (MPa)	TS (MPa)	vE0°C (J)
	Web x Flange					
SN490B	32×40	Y-D	76	485	620	69
TMCP385B	32×40	Y-DM	76	520	660	77

2 "NS-40Z" covered Electrode for thick hot-dip galvanized steel plate

Applications In structures exposed to corrosive environments such as deck plates, exterior walls, and roofs

Features

- Robust arc spraying and outstanding resistance to porosity, facilitating thick plating with zinc deposits of up to the level of 550 g/m².
- Continuous and highly concentrated arc even in the presence of zinc vapor, ensuring reliable penetration.
- Excellent tracking, coverage, and slag removability, resulting in aesthetically pleasing weld beads.



3 "SX-55HC" SX wire for high heat input welding

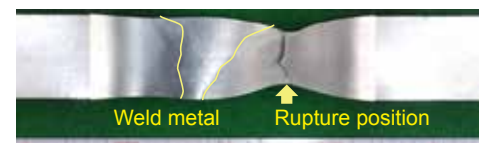
Applications Welding of beam flange joints, columns and through diaphragms where full penetration is required.

Features

- Applicable to 490N/mm² class steel sheet up to a maximum heat input of 100kJ/cm.
- Excellent weldability and mechanical properties are obtained even with high heat input welding.

Table: Weld metal properties of SX-55HC

Steel type	thickness (mm)	Heat input (kJ/cm)	YP (MPa)	TS (MPa)	vE0°C (J)
SN490B	25	100	433	582	96

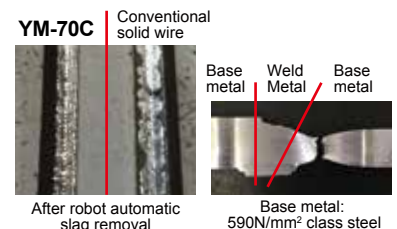


4 "YM-70CM" solid wire for robot welding, ideal for welding 590N/mm² class box column for building structure.

Applications Welding of beam flange joints, columns and through diaphragms where full penetration is required.

Features

- Good in slag removability even for high-strength materials and excellent defect resistance.
- Reliable mechanical properties certified by the Minister can be obtained.



5 "SX-26" with improved low-fume emission for convenient usage

Applications Suitable for welding beam flange joints, columns and through diaphragms requiring full penetration is required.

Features

- Generate less fumes compared to solid wire while maintaining the performance of the conventional SX-26.

